

**Listing of the Claims:**

The following is a complete listing of all the claims in the application, with an indication of the status of each:

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1           Claims 1-3 (Canceled).

2           Claim 4. (Currently Amended) An edge correction apparatus for a digital video camera, comprising:

3           a horizontal edge signal generator and a vertical edge signal  
4           generator for respectively generating horizontal and vertical edge  
5           correction signals in horizontal and vertical directions of a sensed image  
6           obtained via an image sensing element of a digital video camera;

7           a horizontal edge signal gain controller and a vertical edge signal  
8           gain controller for controlling gains of the horizontal and vertical edge  
9           correction signals respectively from said horizontal edge signal generator  
10          and said vertical edge signal generator;

11          an adder for adding the horizontal and vertical edge correction  
12          signals whose gains are controlled by said horizontal edge signal gain  
13          controller and said vertical edge signal gain controller;

14          a slice processor for adding, to an image processing signal of the  
15          digital video camera, an edge correction signal obtained by performing  
16          slice processing for and edge signal output from said adder; and

17          a vertical edge component suppression position detector for causing  
18          said vertical edge signal gain controller to execute gain control of the  
19          vertical edge correction signal in accordance with a horizontal difference  
20          signal output from said horizontal edge signal generator,

21          An apparatus according to claim 1, wherein the horizontal  
22          difference signal is a signal corresponding to a pixel value less a weighted  
23          sum of a luminance difference between horizontally adjacent pixels on  
24          opposite horizontal sides of said pixel that is output from said horizontal  
25          edge signal generator and a difference between digital video camera CCD  
26          output signals vertically adjacent at the same pixel position on opposite

27        vertical sides of said pixel.

1            Claim 5. (Currently Amended) An edge correction apparatus for a  
2        digital video camera, comprising:

3            a horizontal edge signal generator and a vertical edge signal  
4        generator for respectively generating horizontal and vertical edge  
5        correction signals in horizontal and vertical directions of a sensed image  
6        obtained via an image sensing element of a digital video camera;

7            a horizontal edge signal gain controller and a vertical edge signal  
8        gain controller for controlling gains of the horizontal and vertical edge  
9        correction signals respectively from said horizontal edge signal generator  
10      and said vertical edge signal generator;

11        an adder for adding the horizontal and vertical edge correction  
12      signals whose gains are controlled by said horizontal edge signal gain  
13      controller and said vertical edge signal gain controller;

14        a slice processor for adding, to an image processing signal of the  
15      digital video camera, an edge correction signal obtained by performing  
16      slice processing for and edge signal output from said adder; and

17        a vertical edge component suppression position detector for causing  
18      said vertical edge signal gain controller to execute gain control of the  
19      vertical edge correction signal in accordance with a horizontal difference  
20      signal output from said horizontal edge signal generator.

21        An apparatus according to claim 1, wherein the horizontal  
22      difference signal is a signal corresponding to a pixel value less a weighted  
23      sum of an output difference between horizontally adjacent pixels on  
24      opposite horizontal sides of said pixel that is output from said horizontal  
25      edge signal generator and a difference between digital video camera CCD  
26      output signals vertically adjacent at the same pixel position on opposite  
27      vertical sides of said pixel.

1            Claim 6. (Currently Amended) An edge correction apparatus for a  
2        digital video camera, comprising:

3           a horizontal edge signal generator and a vertical edge signal  
4           generator for respectively generating horizontal and vertical edge  
5           correction signals in horizontal and vertical directions of a sensed image  
6           obtained via an image sensing element of a digital video camera;  
7           a horizontal edge signal gain controller and a vertical edge signal  
8           gain controller for controlling gains of the horizontal and vertical edge  
9           correction signals respectively from said horizontal edge signal generator  
10          and said vertical edge signal generator;

11          an adder for adding the horizontal and vertical edge correction  
12          signals whose gains are controlled by said horizontal edge signal gain  
13          controller and said vertical edge signal gain controller;

14          a slice processor for adding, to an image processing signal of the  
15          digital video camera, an edge correction signal obtained by performing  
16          slice processing for and edge signal output from said adder; and

17          a vertical edge component suppression position detector for causing  
18          said vertical edge signal gain controller to execute gain control of the  
19          vertical edge correction signal in accordance with a horizontal difference  
20          signal output from said horizontal edge signal generator.

21          An apparatus according to claim 1, wherein gain control of the  
22          vertical edge correction signal by said vertical edge signal gain controller  
23          is executed when an amplitude of the horizontal difference signal exceeds  
24          a set threshold which is greater than zero.

1           Claim 7. (Currently Amended) An edge correction apparatus for a  
2          digital video camera, comprising:

3           a horizontal edge signal generator and a vertical edge signal  
4           generator for respectively generating horizontal and vertical edge  
5           correction signals in horizontal and vertical directions of a sensed image  
6           obtained via an image sensing element of a digital video camera;

7           a horizontal edge signal gain controller and a vertical edge signal  
8           gain controller for controlling gains of the horizontal and vertical edge  
9           correction signals respectively from said horizontal edge signal generator

10       and said vertical edge signal generator;  
11       an adder for adding the horizontal and vertical edge correction  
12       signals whose gains are controlled by said horizontal edge signal gain  
13       controller and said vertical edge signal gain controller;  
14       a slice processor for adding, to an image processing signal of the  
15       digital video camera, an edge correction signal obtained by performing  
16       slice processing for and edge signal output from said adder; and  
17       a vertical edge component suppression position detector for causing  
18       said vertical edge signal gain controller to execute gain control of the  
19       vertical edge correction signal in accordance with a horizontal difference  
20       signal output from said horizontal edge signal generator, wherein the  
21       horizontal difference signal is a signal corresponding to a luminance  
22       difference between horizontally adjacent pixels that is output from said  
23       horizontal edge signal generator and,  
24       An apparatus according to claim 2, wherein gain control of the  
25       vertical edge correction signal by said vertical edge signal gain controller  
26       is executed when the luminance difference between horizontally adjacent  
27       pixels is not less than a set threshold which is greater than zero.

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1           Claim 8. (Currently Amended) An edge correction apparatus for a  
2       digital video camera, comprising:  
3       a horizontal edge signal generator and a vertical edge signal  
4       generator for respectively generating horizontal and vertical edge  
5       correction signals in horizontal and vertical directions of a sensed image  
6       obtained via an image sensing element of a digital video camera;  
7       a horizontal edge signal gain controller and a vertical edge signal  
8       gain controller for controlling gains of the horizontal and vertical edge  
9       correction signals respectively from said horizontal edge signal generator  
10       and said vertical edge signal generator;  
11       an adder for adding the horizontal and vertical edge correction  
12       signals whose gains are controlled by said horizontal edge signal gain  
13       controller and said vertical edge signal gain controller;

14           a slice processor for adding, to an image processing signal of the  
15           digital video camera, an edge correction signal obtained by performing  
16           slice processing for and edge signal output from said adder; and  
17           a vertical edge component suppression position detector for causing  
18           said vertical edge signal gain controller to execute gain control of the  
19           vertical edge correction signal in accordance with a horizontal difference  
20           signal output from said horizontal edge signal generator, wherein the  
21           horizontal difference signal is a signal corresponding to an output  
22           difference in green signal between horizontally adjacent pixels that is  
23           output from said horizontal edge signal generator and,

24           An apparatus according to claim 3, wherein gain control of the  
25           vertical edge correction signal by said vertical edge signal gain controller  
26           is executed when the output difference in green signal between  
27           horizontally adjacent pixels is not less than a set threshold which is greater  
28           than zero.

1           Claim 9. (Original) An apparatus according to claim 4, wherein  
2           gain control of the vertical edge correction signal by said vertical edge  
3           signal gain controller is executed when the luminance difference between  
4           horizontally adjacent pixels is not less than a set threshold, and outputs of  
5           vertically adjacent digital video camera CCD output signals are not more  
6           than a set threshold.

1           Claim 10. (Original) An apparatus according to claim 5, wherein  
2           gain control of the vertical edge correction signal by said vertical edge  
3           signal gain controller is executed when the output difference in green  
4           signal between horizontally adjacent pixels is not less than a set threshold,  
5           and the difference between the vertically adjacent digital video camera  
6           CCD output signals is not more than the set threshold.